

SEQUENCE LISTING

<110> SHAO, Wei et al.

<120> ISOLATED HUMAN TRANSPORTER PROTEINS,
NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS,
AND USES THEREOF

<130> CL001163

<160> 6

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 3625

<212> DNA

<213> Human

<400> 1

gaacccagtt gcttcagcga gtcgaactac agtttaacc tcataaataa tggcatctcc 60
cttgcttgct gcagcaggga tggaaagaat gtcactttct ttttaagcta gcaagcttt 120
tcttttctt tttcttcttc tatttaaaaa ttctaatcat ggatgcttct tccgaccctt 180
atttgcctta tgacggggga ggagacaata ttcccctgag ggaattacat aaaagaggaa 240
ctcattatac aatgacaaat ggaggcagca ttaacagttc tacacattta ctggatctt 300
tggatgaacc aattccaggta gttgtacat atgatgattt ccatactatt gattgggtgc 360
gagaaaaatg taaagacaga gaaaggcata gacgatcaa cagcaaaaag aaagaatcag 420
catggaaat gacaaaaagt ttgtatgtg cgtgtcagg atggctagta gtaacactaa 480
caggattggc atcaggggca ctggccggat taatagacat tgctggcgt tggatgactg 540
acttaaagga gggcattgc cttagtgctg tggatgacaa ccacgaacag tgctgttggg 600
gatctaattg aacaacattt gaagagaggg ataaatgtcc acagtggaaa acatgggcag 660
aattaatcat aggtcaagca gagggtcctg gttcttatcat catgaactac ataatgtaca 720
tcttctggc cttgagttt gccttcttg cagttccct ggtaaaggta tttgctccat 780
atgcctgtgg ctctgaaatt ccagagatta aaactattt aagtggattc atcatcagag 840
gttacttggg aaaatggact ttaatgatta aaaccatcac attagtcctg gctgtggcat 900
caggtttgag ttttagaaaa gaaggtcccc tggatcatgt tgccctgtgc tgccgaaata 960
tcttttctt cctcttcca aagtatagca caaacgaagc taaaaaaagg gaggtgctat 1020
cagctgcctc agctgcaggg gtttctgttag ctttggcgc accaattgga ggagttctt 1080
tttagctggc agaggttagc tattatttc ctctcaaaac tttatggaga tcatttttg 1140
ctgcttttagt ggctgcattt gtttggaggt ccatcaatcc atttggtaac agccgtctgg 1200
tctttttta tggatggatcatacaccat ggtaccttt tgaactgtt ccttttattc 1260
ttcttaggggt atttggaggg ctttggggag ctttttcat tagggcaaat attgcctgg 1320
gtcgtcgacg caagtccacg aaatttggaa agtatcccgt tctggaaatc attattgtt 1380
cagccattac tgctgtgata gccttccctt atccatacac taggctaaac accagtgaac 1440
tgatcaaaga gcttttaca gactgtggc ccctggaaatc ctcttcttt tggactaca 1500
gaaatgacat gaatgccagt aaaattgtcg atgacattcc tgatgttcca gcaggcattg 1560
gagtatattc agctatatgg cagttatgcc tggcactcat atttaaaatc ataatgacag 1620
tattcactt tggcatcaag gttccatcag gtttgcattt ccccagcatg gccattggag 1680
cgatcgagg aaggattgtg gggattcgg tggagcagct tgcctactat caccacgact 1740
ggtttatctt taaggagtgg tggatggcgt gggctgattt cattacaccc ggcctttatg 1800
ccatgggttgg tgctgtgc tgcttaggtt ggtgacaag aatgactgtc tccctgggg 1860
ttattgttt tgagcttact ggaggcttgg aatatattgt tcccctttagt gctgcagtca 1920
tgaccagtaa atgggttggc gatgccttgc gcaggaaagg catttatgaa gcacacatcc 1980
gattaaatgg atacccttcc ttggatgcaa aagaagaatt cactcatacc accctggctg 2040
ctgacgttat gagacccgtcgaa aggaatgatc ctcccttagc tgccctgaca caggacaata 2100

tgacagtttgg	tgatatacgaa	aacatgat	tttgccttgc	atgaaaccag	ctacaatgg	tttcctgtca	2160
taatgtcaaa	agaatctcg	agattagtgg	gatttgcctt	cagaagagac	ctgacaattt	2220	
caatagaaaag	tgccaggaaa	aaacaagaag	gtatcggtt	cagttctcg	gtgtgtttt	2280	
cacagcacac	cccatctttt	ccagcagaaa	gtcctcgccc	attgaagtt	cgaagcattt	2340	
ttgacatgag	cccttttaca	gtgacagacc	acaccccaat	ggagattgt	gtggatattt	2400	
tccgaaagct	gggactgagg	cagtgcctt	taactcaca	tgggcgcctc	cttggcattt	2460	
taacaaaaaa	agatatcctc	cggcatatgg	cccagacggc	aaaccaagac	cccgcttcaa	2520	
taatgttcaa	ctgaatctca	cagatgagga	gagagaagaa	acggaagagg	aagtttattt	2580	
gttgaatagc	acaactctt	aacctgggg	agtcatctac	tttttttcc	tcctttacaa	2640	
aaaaagaaaag	gaaatataaa	agccgggtt	ttgcaacat	gtttgcaat	aatgctgg	2700	
gaatggagga	gttgggggg	gagggaaagg	agagagaagg	aaaggagtga	gttattttcc	2760	
gtctaacaga	aagcagcgta	tcaactccta	ttgttctgca	ctggatgcat	tcagctgagg	2820	
atgtgcctga	tagtgcaggc	ttgcgcctca	acagagat	cagcagagtc	ctcgagcacc	2880	
tggcctgtt	ctccaaacatt	gcaaagacac	attatcagtc	cctatttcta	gagggattac	2940	
tttgaattga	gccatctata	aaactgcaag	gtcttgcctt	tttttttaat	caaaactgtt	3000	
ctgtttaatt	catgaattgt	atagttaa	attaccttc	tacattccag	aagagcc	3060	
atttctctct	ctctctct	ctctctct	ctctctact	agctgtt	aagcctt	3120	
aaatcggtt	atccctttt	agcagtc	tctcatatt	agatgtact	tgatttact	3180	
gaggtttcat	cacaagaagg	gagtgttct	tgtgccat	accatgt	ttgtaccat	3240	
actaaatgt	tggAACAGTA	cacatgcacc	acaacaaagg	ctcatcaa	aggtaaagtc	3300	
tcgaaggaaag	cgagaacgaa	atctctcatt	gtgtgcctg	tggctcaaaa	ccgaaaacaa	3360	
tgaagcttgg	ttttaaagg	taaagg	tttttgc	tcctctcaga	ctttatgg	3420	
aatgtgaccg	ggtcttatgc	aaatttcta	tttctaa	tactactat	atatacaagt	3480	
gctgttgagc	ataattaaat	aaaatgctgc	tgctttgaca	gtaaagagaa	aaaaaaaaaa	3540	
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	3600	
aaaaaaaaaa	aaaaaaaaaa	aaaaaa				3625	

<210> 2
<211> 791
<212> PRT
<213> Human

```

<400> 2
Met Asp Ala Ser Ser Asp Pro Tyr Leu Pro Tyr Asp Gly Gly Gly Asp
1 5 10 15
Asn Ile Pro Leu Arg Glu Leu His Lys Arg Gly Thr His Tyr Thr Met
20 25 30
Thr Asn Gly Gly Ser Ile Asn Ser Ser Thr His Leu Leu Asp Leu Leu
35 40 45
Asp Glu Pro Ile Pro Gly Val Gly Thr Tyr Asp Asp Phe His Thr Ile
50 55 60
Asp Trp Val Arg Glu Lys Cys Lys Asp Arg Glu Arg His Arg Arg Ile
65 70 75 80
Asn Ser Lys Lys Lys Glu Ser Ala Trp Glu Met Thr Lys Ser Leu Tyr
85 90 95
Asp Ala Trp Ser Gly Trp Leu Val Val Thr Leu Thr Gly Leu Ala Ser
100 105 110
Gly Ala Leu Ala Gly Leu Ile Asp Ile Ala Ala Asp Trp Met Thr Asp
115 120 125
Leu Lys Glu Gly Ile Cys Leu Ser Ala Leu Trp Tyr Asn His Glu Gln
130 135 140
Cys Cys Trp Gly Ser Asn Glu Thr Thr Phe Glu Glu Arg Asp Lys Cys
145 150 155 160
Pro Gln Trp Lys Thr Trp Ala Glu Leu Ile Ile Gly Gln Ala Glu Gly
165 170 175
Pro Gly Ser Tyr Ile Met Asn Tyr Ile Met Tyr Ile Phe Trp Ala Leu
180 185 190

```

Ser Phe Ala Phe Leu Ala Val Ser Leu Val Lys Val Phe Ala Pro Tyr
 195 200 205
 Ala Cys Gly Ser Gly Ile Pro Glu Ile Lys Thr Ile Leu Ser Gly Phe
 210 215 220
 Ile Ile Arg Gly Tyr Leu Gly Lys Trp Thr Leu Met Ile Lys Thr Ile
 225 230 235 240
 Thr Leu Val Leu Ala Val Ala Ser Gly Leu Ser Leu Gly Lys Glu Gly
 245 250 255
 Pro Leu Val His Val Ala Cys Cys Gly Asn Ile Phe Ser Tyr Leu
 260 265 270
 Phe Pro Lys Tyr Ser Thr Asn Glu Ala Lys Lys Arg Glu Val Leu Ser
 275 280 285
 Ala Ala Ser Ala Ala Gly Val Ser Val Ala Phe Gly Ala Pro Ile Gly
 290 295 300
 Gly Val Leu Phe Ser Leu Glu Glu Val Ser Tyr Tyr Phe Pro Leu Lys
 305 310 315 320
 Thr Leu Trp Arg Ser Phe Phe Ala Ala Leu Val Ala Ala Phe Val Leu
 325 330 335
 Arg Ser Ile Asn Pro Phe Gly Asn Ser Arg Leu Val Leu Phe Tyr Val
 340 345 350
 Glu Tyr His Thr Pro Trp Tyr Leu Phe Glu Leu Phe Pro Phe Ile Leu
 355 360 365
 Leu Gly Val Phe Gly Gly Leu Trp Gly Ala Phe Phe Ile Arg Ala Asn
 370 375 380
 Ile Ala Trp Cys Arg Arg Lys Ser Thr Lys Phe Gly Lys Tyr Pro
 385 390 395 400
 Val Leu Glu Val Ile Ile Val Ala Ala Ile Thr Ala Val Ile Ala Phe
 405 410 415
 Pro Asn Pro Tyr Thr Arg Leu Asn Thr Ser Glu Leu Ile Lys Glu Leu
 420 425 430
 Phe Thr Asp Cys Gly Pro Leu Glu Ser Ser Ser Leu Cys Asp Tyr Arg
 435 440 445
 Asn Asp Met Asn Ala Ser Lys Ile Val Asp Asp Ile Pro Asp Arg Pro
 450 455 460
 Ala Gly Ile Gly Val Tyr Ser Ala Ile Trp Gln Leu Cys Leu Ala Leu
 465 470 475 480
 Ile Phe Lys Ile Ile Met Thr Val Phe Thr Phe Gly Ile Lys Val Pro
 485 490 495
 Ser Gly Leu Phe Ile Pro Ser Met Ala Ile Gly Ala Ile Ala Gly Arg
 500 505 510
 Ile Val Gly Ile Ala Val Glu Gln Leu Ala Tyr Tyr His His Asp Trp
 515 520 525
 Phe Ile Phe Lys Glu Trp Cys Glu Val Gly Ala Asp Cys Ile Thr Pro
 530 535 540
 Gly Leu Tyr Ala Met Val Gly Ala Ala Ala Cys Leu Gly Gly Val Thr
 545 550 555 560
 Arg Met Thr Val Ser Leu Val Val Ile Val Phe Glu Leu Thr Gly Gly
 565 570 575
 Leu Glu Tyr Ile Val Pro Leu Met Ala Ala Val Met Thr Ser Lys Trp
 580 585 590
 Val Gly Asp Ala Phe Gly Arg Glu Gly Ile Tyr Glu Ala His Ile Arg
 595 600 605
 Leu Asn Gly Tyr Pro Phe Leu Asp Ala Lys Glu Glu Phe Thr His Thr
 610 615 620
 Thr Leu Ala Ala Asp Val Met Arg Pro Arg Arg Asn Asp Pro Pro Leu
 625 630 635 640
 Ala Val Leu Thr Gln Asp Asn Met Thr Val Asp Asp Ile Glu Asn Met

645	650	655
Ile Asn Glu Thr Ser Tyr Asn Gly Phe Pro Val Ile Met Ser Lys Glu		
660	665	670
Ser Gln Arg Leu Val Gly Phe Ala Leu Arg Arg Asp Leu Thr Ile Ala		
675	680	685
Ile Glu Ser Ala Arg Lys Lys Gln Glu Gly Ile Val Gly Ser Ser Arg		
690	695	700
Val Cys Phe Ala Gln His Thr Pro Ser Leu Pro Ala Glu Ser Pro Arg		
705	710	715
Pro Leu Lys Leu Arg Ser Ile Leu Asp Met Ser Pro Phe Thr Val Thr		
725	730	735
Asp His Thr Pro Met Glu Ile Val Val Asp Ile Phe Arg Lys Leu Gly		
740	745	750
Leu Arg Gln Cys Leu Val Thr His Asn Gly Arg Leu Leu Gly Ile Ile		
755	760	765
Thr Lys Lys Asp Ile Leu Arg His Met Ala Gln Thr Ala Asn Gln Asp		
770	775	780
Pro Ala Ser Ile Met Phe Asn		
785	790	

<210> 3
<211> 65359
<212> DNA
<213> Human

<220>
<221> misc_feature
<222> (1)...(65359)
<223> n = A,T,C or G

<400> 3
aattctatac aaatataatt atatagatat atattacata tacacacaat tgtttatctt 60
taaaaataat tcaaatatgg ctacaaaact tttacaatat gaaggattgt cagtatttt 120
tttaccggga ggatttcccc catcagttag tgctgactgt cattttcatt ctttatgatc 180
aagttgtaga tcagaaaaaa caagttaaga gagtcctac aaataccggg aaaacttgc 240
gatagatttt cattttttat gtaaagacat ataagaacat gaatggtata aaaacaaaaat 300
cctttataaa tgccatacaa ttatatattt agaaaaattt tatggtgta aaacatataa 360
aagaaccaca cactccaaa tttacattga gctaatttag tacagttgc ctttgtcaaa 420
gctttccctt tttaaaaaaa ctattggctc agtgcgcagg aaggagcata ggagaaaaaa 480
ttgccaagaa tatttgaaaa atacagaaaa taaagaaaaa aatcacctac tattcttatca 540
aaaattttaa tagctagaat caggataaga tagaatattc ctgtggcagt aattctagtc 600
tatattccct tcctggacc ctgtctcca aatttcagggt gagattttt aagaagctct 660
gtttatctga gattttaaat ataaaaactt gatttaacct atacagttt tttttttttt 720
cctaaataag taaaatttag tactccacaa attgaagaga atttctctt tctttttact 780
gcctctgag ttttctctt cttctctca cctccaattt tcatgtaaac acttcagtt 840
cgagtggacc ttagagattt tctcattcaa tacttttagga aaacaaattt tatagaaccc 900
ttgagttctg tggaaatttgc tctaatttgc aacacctttt gttgttggt ttgttttagt 960
acactgtgta acaggcattt caggaggaga atctccctgt ctagaggaat cctctcagag 1020
gtagctataa aatatttgc tctgatctc aataaggcatt gtgcgggtt tttttttttt 1080
tttaatgaca gttttaaaca agaaagttgc tttttttctg aacttcataa aaatttctat 1140
taaagagaca atttctgaat tttataacaa tttctagaac agttgagttac ctcactttga 1200
gacacatttt tgctaaaaatg taaaaacaca aaacccttat gagataaaat aggaagctag 1260
tagagatagg aaagtccctt gcttagttaa ccttttttgcgttagtta gacacataca 1320
atagtaaagt tacttagtac gttgatagtt ttctttctcc tcaaaagcttcaatgtctt 1380
ctagctagtt cttcaagaa agaaacaag aagccgctgg aggagattgg tgagtggat 1440
aaaacactat tcaactcttc agttattcgg tttttaatc ctcaatgaaa ggctgctgt 1500

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 4980
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 5040
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 5100
 nnnnnnnnnn nnnnnnaaat agtaatatta ataatagtta atatttatta gaatttcctg 5160
 ttagctggat actgtcccta agtgggttt tttgttgtt ttgtgtgt tttgtttc 5220
 ttaagagaga ggtatcactt ttcacccag gctgagtgca agtggagtga ttatagcaaa 5280
 tgcagccttg aactactggg cttagatcct ccgtctcacc ctccttgta cctggactg 5340
 caggcttgca acacccgtcc tggctaatt aaaaaacaaa atttttttt ttttaggaa 5400
 gagtctcaact atgttgtcca ggctggctc caactcctgg gctcaagcaa ccctcctgccc 5460
 ttggcctccc aagtagctga gattacaggt gcgagccact gtgcctgct tttcttaagt 5520
 gctttatgtt tatgaaatta tttaaatcct catcacaagt ttatgaagta ggtactgtt 5580
 taatccccat tttctagttt acaagactga ggtaaggaat ttgttaaggaa aagtccagaat 5640
 tccatccaga tatttggctc atacttaat catgaggctc aactgctct ctctacacgt 5700
 atcttcatacg taacttgtt tttaaatcct gttagaagcat aagaagttt aacacagaca 5760
 gaatcctgtt gaagtttagta aatttcttagt gaacgataga aatgatagaa atctttctt 5820
 cccccaagaat cccaaagaaca gattagtcg ctttgacaa gtgttatcaa agtagactgt 5880
 ttcacatac acggggact caataggca ttcctgggtt atataataaa atgagtaat 5940
 gcgataacag gaggaaatgc ctatgtgtt gctctggat tagttttagt acaacaaagg 6000
 cagctttgtt gtgagtcagt agagagggta gtgtagaaag gtggaaaggta gaagagtggc 6060
 agatcctaga ggactaatga tgggcttaaa ccacaaaaag tttcgctttt ccattgaaat 6120
 aaaagtttg ggtcttattt tttcaattttt ctccctgaaa ttatttctt acattcatta 6180
 gctcagcagt gtatctaaat aaagctttt tgggttctt ttataataga ggtttgttcc 6240
 ttttttttcc ctttggaaaat tatcattttt tgacattat ttggaaaatcc aggtgttata 6300
 tttatattttt attgcccagg ggacatttcg caggctctt gtaaaatgtt ttttaggattc 6360
 agatacttat tatattttt ttggccctaa tattttatcc aactagaaaa ttaaacctct 6420
 tcttaaaaat taatccatct aagtgtctgt aaattaaagg aacaactaaa gattctttat 6480
 ttgggtgtcag aaactccctt tttctacaac agtagtataa aacaaagcct gttttaaat 6540
 gtactttcc cacagttatct gaatttcaaa tcttcaataa aatctgggtc atattactac 6600
 ctctagctt atttctaaa aatagctgac acttttagt gttttaattt atgcccatttc 6660
 atggcttgtc agaaatgctt tttatcaaga tttccgagtg tgaacagatt tcctgcccga 6720
 ttgattaagt ttgttaattttt ggcttatttc ccagcatcga ggttctgtt ttgcgtttat 6780
 gcaggagact ggttagttaa attgaactttt aagggtttgt ttcttgggtt taagtttaca 6840
 tatgttttaat ttcttagttt ttttaggccc ttggcaactt taatttaggtc ataaaatgg 6900
 tttactcttag tttctctaaac aaattttata aatttatgaa atatgaaatt tagcaaattt 6960
 tataaacctt tttatccatg tattgtacag ctcatcatat ttgcagacat aataattgaa 7020
 ttgttccaattt acacagatgt cttatccatc accttacatcat ctctaaactaa 7080
 agatgtggc tttttatccc tgggtggca acagaacaga aaagaaaaca gtgaatttgag 7140
 taatgggctt agtattgctg ctgcctgggtt gtgtatctt ggtttacttc tttgagattt 7200
 ggcatttaact tgcaagtctt tgcaaggtagt acagttaaat atgactgaat ggctgaacaa 7260
 attttatagat cgtatgcttcc ttttttgcata tttatccatc cagtagacat ttaatttgacc 7320
 acctgctaaa ttgtgaggcac tattcttgcatttcc tttatccatc tttggagttt 7380
 gctaacatttcc ttggaaacttcc actatcaact tagaacgtttt accttccatcc cccttaccag 7440
 gatggccattt tttatccatc aggggtcagag agagagaaaa aaaaaccat ctggggcttag 7500
 acttcctgtt cttatccatc agaagcaat aggttggaa ggaatccatata gtatccatc 7560
 tttctggcttcc tttatccatc aattttttttaaaaatggca tttatccatc tttggagttt 7620
 tttatccatc tttatccatc aattttttttaaaaatggca tttatccatc tttggagttt 7680
 tttatccatc tttatccatc aattttttttaaaaatggca tttatccatc tttggagttt 7740
 taaaactattt atttgatataa acccccttttga gaaaaggctt aggctcctgc cagtgactt 7800
 gtgtatattt ctaataagct cagttttagt cgcagcaattt aagggttgggtt tttttttttt 7860
 tttttatattt cttatccatc aattttttttaaaaatggca tttatccatc tttggagttt 7920
 tttttatattt cttatccatc aattttttttaaaaatggca tttatccatc tttggagttt 7980
 ctcaagttt taacatgttg atcatgaaac cagttgactt gtgaccagta tttttttttt 8040
 aaagattttttttaaaaataaaatccatc tttatccatc tttggagttt 8100
 ttactaaactt ttgggtttat ttaagtttcatc atcttataccatc tttatccatc tttggagttt 8160
 ctccacttca ttgggtttat ttaagtttcatc atcttataccatc tttatccatc tttggagttt 8220
 aagtacacccctt ggggtttttttaaaaataaaatccatc tttatccatc tttggagttt 8280
 agaatggggta tttatccatc tttatccatc tttatccatc tttggagttt 8340

agaaaatatt taaaatgtca catactaaag taaaatgttt aatgtttgaa aattttctgg 15240
ttttcagaga ttttgaattt ctgaatcggt gtgttaaattt agatgttgag tagtttccac 15300
agagaatta tttgaaagtc actgaaagca agacacatgc ctaatgtaaa tggttattgc 15360
actactgtac ctttttctac ctcataaaaa tgagaatagc agtctgtact tttccacttc 15420
gtcattcgta agtcttgca gaaattcata ttttgtttgc ttattatctt cacgctgtaa 15480
atagcttcaa aattctttaa gtggggctag cgatgttata tggatatacatg ttaagtggta 15540
tagaaatttc actttttttt tttgcataa agagtaacaa gaccagtagt ccataatttct 15600
tcagctctac coagagaagg gcaatgtagg agggaaaatg aagtttgc当地 aatatttcat 15660
agtaggc当地 ttcttaaagt aacttcagac ttacagaagt ttaaaaatag tacaagaat 15720
ccccatatac ctgtcacccc aattcctgaa attataat tttaccacat ttgttc当地 15780
tgtctgtatt ctccaagtagc gatataatgc attataatgtt atatgttagc ttttatata 15840
acatagggca tggatgtact atataatttt ttctgagcca cataaagagt aaaacgc当地 15900
catgacgtgc ttttactcct aataacttca gtgtgtgtat tccctcaaga aaggcatt 15960
tcttctgtat agtaccgtt cacttctaca cttttcaaaa tcagaacatt tacattgata 16020
ccatactatg acatgatctg cagaccattt tccaaatatgc cagttgtccc actgtgtcct 16080
tttagtacaaa agaaaaaaatg ttttttctt ggtctaggag ctaatctgg agcacatgtt 16140
acatcctgtt gtttaatct agaaccgtt ctcagttctt tatcttcat aaccttgaca 16200
tttttggaga gtacaatcca tatatttgc agaatttccc ttagttggg tggatgtctgg 16260
ttttccttat aagattcatt ttatgcattt ctggccagag taccacagaa gtactgtata 16320
tcttaccaga aagcctaagt ggcatttgca ttttcttaat gatcaattt aatattat 16380
ggaaagcaga gtcagagatt ctcacatatg tcaagatatt ataagtattt ctgttatatt 16440
tattctccaa ttgtttttt tcaagaaaat ttgtggcctt tcagctagct tttcaaagt 16500
gaagttacta cataacatta ggtatgggagg ggtggggaaag agcttattt aagctttaag 16560
attgagc当地 ttagtatgtt ttgtatgtt atgaaagtgg gcattgtgc agggatttgg 16620
cctttaaacc tttggccaag aatggtatca attattattt ttattatattt ttggagttact 16680
tctgtctaaa cactgaaatc agtgtgccac ttccttttta gaagttttac acctttccaa 16740
ggtacactt ttttttggg gacgagttt gctctgtc当地 ccaggctgga gtcatttggc 16800
gcaatcacag cccacttc当地 cctctgttcc ccagactcca gcagtc当地 cacttc当地 16860
tcccggatg ctgggatttac aggtgcacac caccatgccc agcttagttt ttagagatg 16920
gggttttgc当地 catgttgc当地 aggctggctt ccaactcctg cgctcaatct atccgtcctc 16980
ctcagcctgc caaagtaactg ggattacagg cgtggccac cactccc当地 ttccaaggc 17040
ggcattttaa tggatataat agggagatgg gcaagaaccc tggatgttctt ggttagaagca 17100
aacatttattt agtactattt cgttggattt aatatttagcg ctttctatattt tcatgtcctc 17160
ccagaattt caaaaaaaaactt actctatagt ttattttggct tataatctc当地 gagtaataaa 17220
attagttat tggatgttctt tggatgttattt cttcccttattt ccaccccaag 17280
ttgatttccat atgatcttctt gatcttagtctt aagaatgtttt atagtgatattt cgagaagttc 17340
agattctggc tttaacatattt ataaattttt tttaatctgtt aaacccaaaga gaatgagttt 17400
gtttaaacta gaaagatggc aagagtagtc tggatgtttt gttccatttcc taaaagttcc 17460
tataataaaa taaacatattt ttgttggattt ttttacaat ttttttaaactt attagtagc 17520
agtgccactt ctttatatttctt atatcaaata atgagctaca ttttcaataa taacctctga 17580
gtatattttt gcatggggat gctgcatttac aaaataattt gaggatataa ttatataatc 17640
ctttagctaa aatcacctt tttggattt gatcttagtctt ttccaaagttt atagtgctt 17700
ggaaaaaaatt taaatgttcc tttgtttatg tatctttattt ataaagctgta gcatatata 17760
tgttagttgtc aaggatgtctt atagatactt aatattttaa ggagacttgtt ctaaagttt 17820
ctgtccagga ctggatctg ggccttttgg taacagctca ttgtcttatt tacttaatg 17880
atgattttggat tggatgttctt ttctcttattt tcatagctgt ctctatgggtt ctatgaaaat 17940
actgtgtgtc tgcttataca tataatgttata cctgttaagta caaagtagaa aatgaaagtt 18000
cattttctgc ttttgcataa ttttgcataa agagataacc gtttataataa ttttgc当地 18060
tggatgttgc ttttgcataa ttttgcataa agagataacc gtttataataa ttttgc当地 18120
tttgc当地 ttttgcataa ttttgcataa agagataacc gtttataataa ttttgc当地 18180
ggccaaattttt ttttgcataa ttttgcataa agagataacc gtttataataa ttttgc当地 18240
attcatttacc aatagatgttctt acattttccat tggatgtttt gatcttagtctt tacagataat 18300
ggttcaatattt aatattttaaat ttttgcataa ttttgcataa agagataacc gtttataataa ttttgc当地 18360
ctttagttttt gataggttattt ttttgcataa ttttgcataa agagataacc gtttataataa ttttgc当地 18420
actctcgatg ctaataattt ttttgcataa ttttgcataa agagataacc gtttataataa ttttgc当地 18480
cactctaaac ttttgcataa ttttgcataa agagataacc gtttataataa ttttgc当地 18540
ttgaaatgtc当地 gtggc当地 gaccaacctg ggctcaagca attctctcaa tttagcctac 18600

ttagtagctg ggactacaga cacatatcac catgcccagc atttttttt tttttttt 18660
 ggatttttag tagagatgag gtttgcatt gttgcccaag ctggctcaa attcctgagc 18720
 tcaagcaatc cacccatctc agcctccaa aatgctgggta tacaagcgt gaggcactgc 18780
 acctggccca aaagctctt ttctaatagc aatataaatt gtctttaca gactatactc 18840
 atatatgttt ctctttcag aaataggtgt taagtgtatc taacatgaa tgtatagcta 18900
 taattctcat tgtgaaacca tagcctaatt tatttcata tacaattaa aattcatatt 18960
 ttttaggaag tttcttaga ttaatccggc tagtccagg tgctacagtc ccaagatttc 19020
 tttctttta acaaattaaa tataggtaac atgactagaa ttgttagtcaa agaatattgg 19080
 aaccttggaa ctctcgtatt tgaactttat tttgaaatat aatttggat attataaaaa 19140
 tattataata tattgcaccc ggaagtttagg ggcagtttt ttaattctc tttgtatctg 19200
 ctacactgt aagtgttatt tatgtaaaaa attcttaata gaagtcttca gttgtaaagt 19260
 ctgctgtaca gacttagat caggattgg caaaactatga gccatgtgcc aaatcctgcc 19320
 ctccacccgt tttgtaaata aagttttatc agaacacatt cagactcatt catgaacata 19380
 ttgtctatga tttatttct gctactatgg cagaatttagg ttgttgcac ac tttgtggcat 19440
 ccaaaggccta aaatatttc ttcctcggt ctggccaaac ccgtttttaga ttatgagcac 19500
 ttggcattt ttatgtttt gtttcttcc tatagcacac agtaagatgt tctgcccaca 19560
 ttgtgcataa tttatgggtt tattcaagga tttatgcaag tttgtgcata agaaaaaaac 19620
 cttagaagtga acttgcatttgg ttgaagagaca tctgtgtatg ttaaattttt ttagcttcg 19680
 ccttcccaaa gggattatttccatttccatac ttaaactact aattttgtga taggacttct 19740
 ttctccatag ctggctaaa ttaatgcatt cacacacttc atcttacta atctgataga 19800
 gggaaatgtt attgtggatt tgatttgcat ttctttttt gtttagctt gagcttattt 19860
 tcatatttaa aagccaaatttgcatttctt tcttgagcta tcttttaatg tccttcctga 19920
 tacatttctg aagtctgtga tactcatata agatataatgg tgaacatgtg tcaaagattt 19980
 atttgactct aatgaggaa cccgcctgat gacaaggctg attgagaaga ggtgtgtga 20040
 gatgaagtgt atatcatcg taaaagaaaag caaattctt cagggcaaaa acaaaaaccac 20100
 aactctaagg gttattgtttt ctactggaca gaatttcattt gcattttacc agataaaaat 20160
 tactattttc aatttatctt ttacaaatca ttttctaattt ttacagatgtc tattccctaa 20220
 tcagtagtaa atagcttca aaattctccg cagcgtcagg tgactattat gcaggctaat 20280
 ttgtgacact cgggcttgac ttaaagagaa catgccataa tcttttgcc ttacttccaa 20340
 gttttggata attttcttta acacattttt ctcttaattgc aatgatttca agtataattt 20400
 ttctttttt ttaaattttt ttactat ttttctaattt ttacagatgtc tattccctaa 20460
 gggattttggc agggtcata gacaatagtg gaggaaaggt cagcagataa acatgtgaac 20520
 aaaggctctt ggtttccca ggcagaggac cctgcggcct tccacagtg ttgtgtccct 20580
 gggtacttga gattagggag ttgtgtatgac tcttaatgag catgctgcct tcaagcatct 20640
 gtttaacaaa gcacatctt caccgcctt aatccctta accctgagtt gacatagcac 20700
 atgtttcaga gagcaggggg ttggggtaa gtttatggat taacagcatc ccaaggcaga 20760
 agaatttttc ttagtacaga acaaaatggc gtctctgtg tctacttctt tctacacaga 20820
 cacagtaaca atctgatctc tctttcccc atattcccc ttttctttaattt gacaaaactg 20880
 ccatcctcac catggccctg tctcaatgag ctgttggta caccccccag acagggtggc 20940
 ggcaggcagc aggggctctt cacttccac actggcggc cggcggagg cgccccccac 21000
 ctcccagacg gggcggctgc cggcgggggg cggccccccac ctcccagact ggtggccgg 21060
 gggagacgc tcctcacttcc ccaatgggg cggctgccc gggagggc tcctcacttcc 21120
 tcagatgggg tcgcggctgg gcaagggcgc tcctcaccc ccagacaggg tggcggctgg 21180
 gcaagacgc tcctcaccc ccagacgggg cagccggca gaggcgctcc tcacatccca 21240
 gagggggcgg cggcggcagag ggcgtccca cgtcccagac gatggggcggc cggcggaga 21300
 cgctcctcac ttccttagacg gatggcggc gggaaagagg cgctcctcac ttcttagatg 21360
 ggatggcggc cggaaagagg tgctcctcac ttcttagact gggcggccgg gcagaggggc 21420
 ttctcacatc ccagacgatg ggcagtcagg cagagacgct cctacttcc tagtacaggg 21480
 tggcggccgg gcaaggcgtc caatctcagc acttcggag gccaaggcag gtggctggga 21540
 ggtgggggtt gtagcggcc gagatcacgc cactgcactc cagcctggc aacattgagc 21600
 actgagtgatc cgagactccg tctgcaatcc cggcaccccg ggaggccgag gggcggcagat 21660
 cactcgaggt caggagctgg agaccagccc ggccaaatcg gcaaaacccc gtctccacca 21720
 aaaaacacaa aaaccagtca ggcgtggcgg cgcgtgcctg caatcccagg cactcggcag 21780
 gctgaggcag gagaatcagg caggaagggt gcagtgagcc gagatcgcgg cagtgatgtc 21840
 cagcctcggc aacagaggaa gaccgtggaa agtgggagac ggagacgagg gagaggggaa 21900
 gaccgtggaa agcggggaggt ggagacgagg gagagggaa gggattattt ctgtatgact 21960
 taataatgaa ttcttaatgatc gtcacttagt tcactgttgc tcttctaaa acatactcat 22020

ctttcctttt ctcttctgtat ggaactcatt atacaatgac aatggaggc agcattaaaca 22080
gttctacaca tttactggat cttttggatg aaccaattcc aggtgttggt acatatgatg 22140
attccatac tattgattgg gtgcgagaaa aatgtaaaga cagagaaagg catagacggg 22200
taagtgttt tagaaaaat tttaaaaac atagtcata attagatctt ttaataat 22260
atttctgcca atgatctcg gctgccaaat gtttacattt aatataagta aatgtctaca 22320
tttcatatgt ggtacatgtt tttttttt tctatgtttt attttttag tttacttata 22380
ccctgttaact ttccagaaag gatttcaggt agctaaaaaa caaagaaata caataagaag 22440
acaaaataag aaggaaaggg aaaaatacag cacaggagtt ggggggaaga acaagccaag 22500
ttccagatat ggaggtcagc atgattttgg gctttagc gcccaccagc taaggcaaaa 22560
aaggaaactc attgcatagc tcttacctat ggaaaaagaa gaaatctact gggggcagat 22620
ggtcttgtgg gatttgctg ttttcttta tctcctttcc cagcattga ttctgagata 22680
tttctcaatt tggtcccaa ataaagctt ttgagtgttta taatggtttta ctgtttttt 22740
taaaaatggc tttiacatataa aaaagtacaa cttatggatc cttttgtttt gtggcgtgta 22800
cttactgata atataatcca aaatacattt tttatgtt atttattttat ttatgttta 22860
gacggagtct cagtctctg cccatgctgg agtatagtgg tttgtatattt gctcaactgca 22920
ccctccgcct cctggattca agcgatgctc ctgcctcagc ctcctgagta gctgagacta 22980
caaacgtacg ccaccatgcc tggctagttt ttatcacaaa tacgtttttt aaaaaacaat 23040
tttttttttgg gaggtcgggg gactgtcgcc cattctgtt cccaaactgg agtgcagttg 23100
tgcaatctt gctcaactgca acctctgcct cccaggttca agcgattctt gtactcagcc 23160
tcctgagtag ctggaattat aggtgtgtgc catcatgcca agctaattttt tttatgttta 23220
gttagagatga agtttcgcca tggtagttt gctgtctca gactcctggc ctcaagtgtat 23280
tggctgaccc cagcctccca aagttagaaaa ttttcttga aaataaaaatt ccaaatctca 23340
aaaggcccta tataattttg gtgtggaaa ttacttgc aatggaaaatg actatttaca 23400
caaattataa gcttccatataa taatataatat gtgtgtgaac ctgaaattca aattttatta 23460
tattgtttat gaaaggtaca gcctctgaga ttcatcagat ggtatttacc tttagggcat 23520
atctaaaaat aaaatacagt acatgaaatc cagtgtttt atccagtat tcttaaaactt 23580
tttgcctca gatcccctt aaactcttaa aagatattga agagctccaa ggaggctttg 23640
tttacgtgg ttttatcaat ggatatttac catattagac actgaaactg aggattttaa 23700
aaaaaaataa ttcatataaa aataacagta acaaaaaccca ttacatgtt acataaataa 23760
cattttacg aaactatatt ttcaaaaaatt agtgagagaa tgacattgtg ctacattttg 23820
tataaatctc attattgtct ggcttaataa aacactgctg gattctcata tctgttttt 23880
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 23940
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24000
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24060
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24120
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24180
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24240
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24300
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24360
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24420
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24480
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24540
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24600
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24660
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24720
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24780
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24840
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 24900
aaatgttgac acttatataa tataatcaa tattttaaa atcacattt gttatgtt 24960
ctttgatcta ttccaaaaag actctaagta ttggaaacctt atcatcctca cagtgtatg 25020
tacaagttt ctaaaattct gattttact ggagagctca aattctatca ttggaaacaa 25080
atacacattt atttaactt aaaaatgacag gattacttgg tttcatttattt gagaaaatac 25140
ctgtcaaattt cccaaatctg gaaaaccatg gttttagtgc actcttcaa gttaaaatgg 25200
cattccatgt aagaagtgtc tagtttattt tgcaactcaa ataaattacg caagtgtttt 25260
tctttaggac ataacttcat acatacttcc acaaggcagca gatgtgtgtt gttatgtat 25320
gttcctttagt catggttctt atttcatcac acaaaaatattt aaaaagactc agtggatttgg 25380
acgttagcgt ttttactgtt tcatcaaaga tgctttattt tgaaactggc ataataatgtat 25440

tgatctggaaa gttgcagcag aatgaaatct gagggtgat gcaattttgt 32340
tccactgttt ccaaaaagtg gttttaggc agagattgaa gtatagctga gatgtgttgg 32400
taacaagact ttagggatta ggaaaaaagat taaatgtgct cagggttcct tggatatatgt 32460
aggcattaat tttggactc tacttaaata tttgttcat ataaagttt tattattgtg 32520
gaaataaacc agagagactt tacacattt actgaagtt cttttcttc ttttttttt 32580
ttttttttt tgcccggtgg gatggagtct cactctgtt cccaggctgg agcgcagttg 32640
cacatctcg gctccctgca acctccgctt ctggggttt akgcattctt ctacctcagc 32700
ctcccgagta gctggattt caggcgtgcg ccaccatgcc cagctaattt ttgtattttt 32760
aatagcaacg gggtttccacc acattggcca agctagtctc gaactcctga cctcaggtga 32820
tccaccggcc tcaacctccc cagtgtggg attacaggcg tgagccacca tgcctggccg 32880
tttactgaag tttcttatga caagcattt cattagaggt gcaatgtaaa ttaaattcat 32940
actctcgAAC tattttctt ttagggtctt ggttcttata tcatgaacta cataatgtac 33000
atcttctggg ccttgagttt tgccttctt gcagttccc tggtaaaggt atttgctcca 33060
tatgcctgtg gctctggaaat tccagaggtt agccaagtaa tatttagtgtt cattaaacat 33120
tattatgatg ctatctttt tgaccttagt gataaaaaaa gttggctttt ctggagggag 33180
gggatagttt gttcataata tgaaaaaaaaa atttttttaa gtataagctg atggtagaca 33240
tcattgaaaaa atattgttcc ccatagtcatt ttggtcattt actgtgaagg ctgatTTTT 33300
tttctctca ccactaattt aacacatgac taggcaattt ttcagactat ttagttaaac 33360
atcaagagcc tggagaagttt atcttgcac ctaatgttct ttgacgggtt agttgttact 33420
ttgctgttat gaccctgaat ttttttttt tgagactgag tcttgcgtg tcgcccagac 33480
tggagtgcag tggcgaatc tcagctcaact gcaacctctg cgtcccaaggc tcaagcaatt 33540
cttgcgtctc agcctcctgaa ggagttgcga ttgcaggcac ctgtcaccat gccctgctaa 33600
ttttgcatt tttttgtttt tttttttttt ttagtagaga tggggttca ccatgttggc 33660
caggctggtc tcaaactcct aacctcaagt gatcacccgc ctcagcctcc caaagtgcg 33720
ggattacagg tgtgagccac cacacgtggc tatgaccctg attttgattt attcactttt 33780
tataattacc ttttgcatttataat tattcttggaa tttggccattt ttagtgcattt 33840
agaaaagtgt taatcacagt gggtaacacg tacaaacttt tgggttttat ttttcatcac 33900
aataaagttag agttatacat aggattgattt gaacttgatt tgaacttatac tcttctctt 33960
tattttctg gagttaaata agttaccaac ttttcctaa tacatttctt tttaaaatgg 34020
aattgttattt atcctttaag tttgttattaa gaatatctt cataaaaagc aatatcatgc 34080
agtatataac agttgttact cattcttgat acataaaaaaa ctattgcaca taattacagg 34140
acctcagaga aaacataata ttcttatttc taacataatg gccaaaatattt attaaaataa 34200
ttatgcttat ttttacaaca gaaatattca aatttgcctt tttttgggtt atgtattt 34260
aattccttata attaaggctt gtattcattt taacatggcc tgatattttt attttggct 34320
gagatagtgt tggcctctct ctttcttgg gtagagaattt agattataat atcaatttt 34380
tatatgttagc ataataggca agtttcgaa aaattaactg taaatttttgc ttttagactgc 34440
taaaatttgc aagggtgttt ttgtgcataa aacaagaaaaa taacttggat tggtttacatt 34500
ctcatgtttc taaaaggaca ttaagctgcc ttaatctttt ctttgcattt taaaactatt 34560
ttaagtggat tcatcatcag agtttactt gggaaaatggc cttaatgtat taaaaccatc 34620
acatttagtcc tggctgtggc atcagggttt agtttaggaa aagaaggctt cctggtacat 34680
gttgcctgtt gctcgaaaaa tatctttcc tacctctttt caaagtatag cacaaacgaa 34740
gctaaaaaaa gggaggttaag tgtctttgtt agtttattt actgaaaaat atatattata 34800
tagtattttat ttaagtaaaat aatttcttagt tgaaaaataa ataaattctg tattcagata 34860
aaaaatttttgc agatttgc ttctgtttt cctgaataat ctataacatc tttctagaat 34920
ccattcccaag tgctgctcag ttctgttttccat atttttagaga agcttttagat agacagctgg 34980
tgtccattgg gttcagctg catttcacga agatcttccctt gttatcactt taccttacat 35040
ctttccttctt ctgaagtgtt ttctaaagttt agctttgtttt ttcactcttta cttaacat 35100
taagagggtt gggaaatcttta atagctatgt ttctcttgc gaggagttt ctgggtccag 35160
tgtaagtggt gtgtgatattt aaaaatgttca tccagtgcata tggggaaagttt ctgagggcct 35220
ttagaagctc ttgaagttt aatcagaaat tccacattaa gagattacag gaaatcctt 35280
tcatttgattt gtttaaggca atttcccttta ccatttctt aggccagctt gagatcttct 35340
acaagacattt gaaaccttat atatattatg gatttgcctt gatgtttcca tattgctctg 35400
ggcattttcc tgaatccctt atattagtc tagactttgg gagccagtc cttcccttatt 35460
ttccaaatctt aaatctacag cccttagatgg tacagagatc tttgagttttt taagatatga 35520
tttttgaaaaa aacatctcat taaatactgg cagaacctttt tcattttttt gatgtttttt 35580
atgtactgtt accaaaaaaag tagaatattt tccaaactgtt ttaatcttc aattgaaata 35640
attcttagtac atttaatgtt tcgcatttttta atattgttccctt tgcatggac gtagatatcc 35700

actcttttag ttcaagatgt ttttaaatgt actttttct ttagttgtt tgtattctt 39180
 tttttttt aatgtagaag aggcaaatta aatgcattat aagttaacag gagttggta 39240
 tggtacattt attttaact accatgattt aattgaatgt gaaactcatt ttgaatataa 39300
 aacagcacta ggtattctat tagtatttt tagacattt tgcattt atactgtcaa 39360
 tttgtatga tgcattccat ctccaaaaat aataataaca tcaattttc ttattacagt 39420
 aaaatccatt acatgtaaat tctaactaca gcaaaattt aactttt gagcttagat atttaccatt 39480
 caagttataa tatacagaa acatcttata aaattatagc attaattttt ctttcctt 39540
 tctttttt aggttagcta ttatccc tccaaaactt tatggagatc atttttgct 39600
 gcttttaggg ctgcattgt tttgaggccc atcaatccat ttgttaacag ccgtctggc 39660
 ctttttagt tggagatca tacaccatgg tacctttt aactgttcc ttttatttctt 39720
 cttaggggtat ttggagggtt ttggggagcc ttttcattt gggcaaatat tgccctgggt 39780
 cgtcgacgca agtccacgaa atttggaaag tatccgttc tggaaagtcat tattgttca 39840
 gcattactg ctgtgatagc cttccctaat ccatacacta ggctaaacac cagtgaactg 39900
 atcaaagagc tttttacaga ctgtggtccc ctggaaatcctt cttctctt tgactacaga 39960
 aatgacatga atgccagtaa aattgtcgtt gacattctt atcgccagc aggatttgg 40020
 gtatattcag ctatatggca gttatgcctt gcactcatat taaaatcat aatgacagta 40080
 ttcactttt gcatcaaggt aagtgttaat gtgaggtgtt atttggtaa tttggcatg 40140
 ttcaaaaactt atatgtggaa tgagagaggt tgggtttca taaatgactg aaaaaagtac 40200
 ttatctttt agttaattt taagtaatga aaaagataat tccttagcat atattgttga 40260
 ccatgttattt tgggtctttaaataa cccccaaaaa ctttagcagct taaggttaact 40320
 acttattttt ttcttgatat tgagtcaacg acttggaaag ggctcaactg ggcaattttt 40380
 gcttgggtc tttcatatag ttgttattt aactggcgag ggctaatcat ctccaaagctt 40440
 cttttttcg tttccctttt aaaaaactgt ttttggtt acacagtagc tatataatgt 40500
 ttgggggtat atgaagtatt ttgatagagg catggagtgc ataataatct caggtaat 40560
 ggagtatcca tcacccaaag catttatccc ttgttaca aacaatccaa ttacactt 40620
 aattattttt aagtgtacaa taaattttttaatgatgtt caaagacttc ttcatctt 40680
 actagcacctt aggctaaaaa aattcagaca cctgggtcc tggatcaat cacgcatact 40740
 gtgtctctt ggtctactcc cgctgtctt ctctcttctt ctcgcttcc tttcccttc 40800
 tctctgtggt tttcttaggtt ggtggctca gggatttggaa tttcttataat tatagtctcag 40860
 gattcccaag agggctgttt ttaatgttagc caaagaagtc ttgcagctg acttgggtt 40920
 ttctatttcat tgaggttagt acagaggccc gaccacattt agaggaggaa catacaactt 40980
 ctgggacaag tggtaagagaa ttcatgtatca tggttaaaa ccacttttataatccat 41040
 ttgctgtgtt aataaatttac cacaactttaa tggttaaaa gcccacacaaa tttaatatct 41100
 tacagttctg caaatcaaaa gtctgaaacg gatctactg tgctaaaatt aagggttgc 41160
 tagggcattt tggaggctgtt aggagagagt ctgtttttt gcctttctt gctattttttt 41220
 gctgccagca ttccctggctt cctggctgtc tatttgcattt ttcaagggca gcagtagctg 41280
 gtcaggctt tctctgtctt catcaccctt accccaaactt tgctaaatctt ccctccaca 41340
 ttggaaaaac ctttggattt acttttagggc cacgcagata aatcagaaaaa taatctt 41400
 ttcaagggtc agttgttcc aactttttt tctggcacct tgattccctt ttggcatgca 41460
 acgtatgtt atcacagggtt ctgggatattt agttatggac atctttgtat agccattttt 41520
 ctgcctcata ccagtatagg gtattagctt gaaaggacac tgcagactca tttaatattac 41580
 tagatctata aatacatgcc ttttccatc aagaattaa ggcagctggg tcttgcctt 41640
 tggacattt cttcttttgg atttataaaa taacaaaatt tgggttattaa tggcttatca 41700
 gtaaaatataa tttcttataatgtt gactatcattt gatataatgtt gggaaagcaca tttttttttt 41760
 ttcttggattt ttaaatttttactt accccctgtatca ttcatgtat tttttttttt tttttttttt 41820
 tgcttttataa gatgtttttt aatgtggat aacagctttt tttttttttt tttttttttt 41880
 ttttagttttt tggtaatagg tttttttttt tttttttttt tttttttttt tttttttttt 41940
 cttaggtttttaaataatagaaa agcctggcca ggcgcagttt ctcacacccctt taatccaccc 42000
 tctttggggag gcccggggccg gccggggccg gccggggccg gccggggccg gccggggccg 42060
 tggcgggtttttaaataatagaaa aatgtttttt aatgtttttt aatgtttttt aatgtttttt 42120
 ctgtatccc ggctactcgatcc gggctttttt gggctttttt gggctttttt gggctttttt 42180
 ggttgcattt gggctttttt gggctttttt gggctttttt gggctttttt gggctttttt 42240
 tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 42300
 tacctttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 42360
 agtaagtgtt gggtaatcc caactttctt acagtcgtt gaaactacaag aagctggagg 42420
 caattggcag gccttgcattt aatgtttttt aatgtttttt aatgtttttt aatgtttttt 42480
 tggcagaga gttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 42540

aagagactca agagtacatg ccatcattt gtgttggt catttcata tcagaggagt 42600
 ttattactct ttcagtagtt tgtttggc tttgttgc ttttagaca ggtctcgcc 42660
 ttttgcaca gactagaggg cagtgtca gtctggctc actgtaaacct ccacccccc 42720
 gttcaagcg attctccgc ctcagccccc caagtagctg ggattacagg tggggccat 42780
 cacacccggc taattttgt gtttttagta gagatgtat tttgccatgt tggccaggct 42840
 ggtctggaa tcctgaccc aggtgatcct ttggaggcc ttggccccc agagtgcgt 42900
 gattataggt gtgagccact gaacctggcc tcttcagta gtcttaat gatcttgctt 42960
 atggtgcttc ttatccctgt ttattatcct tattaaattt aatcaataaa tattttctc 43020
 ttttaattt attcatataa atagacttac ctgagagata taggttcagt tcagagcacc 43080
 acaataaaagt gaatatcata ataaagcaag tcacataaaa gtcttagttt cttagtgcatt 43140
 ataaaagttc tgtttacact atgctgttagt cttagtgcata caatagcatt atgtctttt 43200
 aaaaagtaat acttaattt aaaaactt gattgctaaa aaatgctaat agtaatctga 43260
 gtcttcagtg aattgtatc tgtttgctt ctgtagggtc ttgccttgat attgggtggtt 43320
 gtagaggtt ggactggctg tagcaattt taaaataaga taacagtggaa atttgccgca 43380
 ttgattgaca ctgccttca taaaagatt ctctgtgc tttgatgtctt tttgatacca 43440
 ttttacctac agtagaccc ttttcaaaa ttagagtcat cctctcaaac cctgctactg 43500
 ctttatcaac taagtttaag gaaaattcaa aatctttgt cttttaaca atgttcacaa 43560
 catcttacc aggactggat tctaccccaa gaaaccactt tctttgcata tccataagaa 43620
 gtaactcctt atacattcaa gttttttaaa ttagattcta gcaattcagt cacatctta 43680
 ggctacgctt atcatcttag ttctcttgcatttccacca ctctgttagtt acttcttca 43740
 ctgaagtctt gaaccctca gagtcattca tgagagttgg aatcaacttc ttccaaactc 43800
 ctgttaatat tgatattttg acctcctccc atgaaacgtg aatgttctgg atggcatcta 43860
 gaatgggtac tacttttga acattttcaa ttttgc ccggatcaat cagagaagtt 43920
 gtatcagtg gtgggttcc aagttgtcag gggcgaacca tacagatctt cagcaaccc 43980
 aactcttgcc ttctcagagg aagaattt acggaggac ataaggcaga aaaagagact 44040
 gaggcaagtt ttagagcagg agtggaaatgatttattaaa aagctttaga gtgggaatga 44100
 aaagaaattt aaatacactt gaaagaggc caagtgccca tcttggaaaga caagtgcctt 44160
 attgacccctt ggacttaggg ttttatatgt tggcatactt ctggcatctt gcatccctat 44220
 tccattgatt ctcttttgg ggtgagttgc ccacatgctc agtggccctgc tagacttgg 44280
 gaggggagtg tgcacagtgt atttacttga gttgtatgc tgccttaccc aggtgtttgt 44340
 tgcattaccat ccaaagtgc cttaggaggc atattcataa actccatgtat tttgcctcta 44400
 aatgtgcattt cttagccca ctcacccaa tcctggatc ttatcgaaa gctgccatc 44460
 gctagttca ggtgttcta tctattggaa gatggcctt ccctgatgtt ggctgcaacc 44520
 aatttattact ttagagagag agcatgagag ctgtctcacc atcatcacct gatgggttgc 44580
 tgacattccctt ggtgggttgc ggaggatgcc tgcctgcctt tgctcatgccc tgactagcta 44640
 cctgctgtaa caaaagtact atctatggta gctgtagccca tagggaaatgc atttcttcag 44700
 taaaacttaa aagtcaaaat tagtctttaa aacaacatga atctccctgtt acatctccat 44760
 cagagctctt ggaagaccag gtgcattt agtgcattt aatgtttaa aaggaaatctt 44820
 ttgtctgat cagtaggtctt caacagtggg cttaaaatag ttagtaaacc atgtgtaaa 44880
 cagatatgctt gttatccagg ctgttttattt ccatttatac agcacagagaa gagtagattt 44940
 gcataattttt aggattactt aaaaaaaaaa tctttgatca ctctcaaaaaa aaagtacgt 45000
 ctctcactttt atatcaacacg ctaaaaatgg ccaggatattt tggctcacgc ctgtatctc 45060
 catgctttgg gaggccaagg cagaaggatc acttgaggc aggagtttgc gactaacctg 45120
 ggcacacatag taagacccat ctctacaaaaa aaaaaaaaaa aaaaaagaaa gccagggtgt 45180
 gtgggtgcacg ctgttagtcc cagctactca cgaggctgatc tggccaggat cacgcccac 45240
 caagagacgt gacttctgtt ttcaagttgtt cacttagaga ccattgttagg gtttttagtt 45300
 ggactaattt caatatcatt gggtctcagg gaataggaa gcctgagaag agggagagac 45360
 aggggaacacg ccagtttagt gggcacttc accacatata acacttattt agttcacttt 45420
 cttctatggg catgggtcat ggtgcagttt aacaactgtt acaggaacat caaagatcat 45480
 taatcacaga gcactgttac atataataat agtggaaatt ttcaaaatgtt tgagagaatt 45540
 agcaaaaat gatacagaga cacaatgtt ccacatgtt ttggaaaatg agtgcgtatg 45600
 gacttagttt atgcaaggat gtcataaaacc tcaattttgtt aaaactgtt catgtgtgaa 45660
 gcacagtaac acaaagcata gtaaaaacaag atatgtctgtt atatcagtttca aaatattggg 45720
 caactctgtt aagtttgcacttaccaat gtaccactt agatgaatag catctaccat 45780
 ttccgtcatt tgtaaaatata taggaggaca taatcacata atcttgaatgaaaagacgt 45840
 gcttaaaaactt gaatcagttt aatgtttatgtt aaaaacttcc atattgtact tttttttata 45900
 tatattttttaa aatttcaataa gctttgggt tacaatgtt tttggatgtt tggatgtt 45960

ctataatggc gaagtctaag attttactgc aactgtcacc caagtagtat atattgtat 46020
cagcatattg tcctttttt tttctttttt tttttcatt tcaccatgga ctaatgaaaa 46080
ttttgttagg gactgacatt agggcaccc ttagctaccc tgagctaaag gaaataaccc 46140
ttgaattttt ttctgtttgg cctagagaat gtgggttggg ttgtaactga attcatggg 46200
ttgttaaggt acaagattt gcttttagtt tatttgact aggattttgc tatattaata 46260
caatgtaaa agaatcaaaa gtgttagaaa taaatgcata gaatgtaaat ttcaggcatg 46320
ttagtagagg atctctgctc cataaagagt tctgttggg ttataggttc catcaggcct 46380
gttcatcccc agcatggcca ttggagcgtc cgccaggatttggg attgtgggaa ttgcgttgg 46440
gcagcttgcc tactatcacc acgactgggt tatcttaag gagtgggtgt aggtcggggc 46500
tgattgcatt acacctggcc tttatgccc gttgggtgt gctgcatgct taggtaatat 46560
ggctgtgtct gcctgtgtgt ggatgttgc aagtctgaga gagccaagag aaagtggac 46620
acattcttgc ttaattgggt ggcggattgg ttgagtaaag gagggtgcca ggaggagatg 46680
tttaaacaga taagaaacag tagtactatt agggtattat acagtaccgg tttctgtct 46740
tacaacattt gttaaatcaa gaatttaatg gcattagcat attgtaatat aacttaatac 46800
actatggcag aagccatcta agtacaacat aagcttaatt tgaatcctga ccaaagatgt 46860
cttgattct ttcatcgta aggatcttgg cttacctata acaactatag cataataacct 46920
aagatttagca ttgcaacaga gtttcagagt aggtttaattt tggttctgaa atgattttt 46980
gttagccta gtaaaagatg tatttacca tgctccatca tctaaggat atttgtaaaca 47040
aaatgagaaa aggttaacttc attttaatga gaagaaaagc aaaataccta cattaagtac 47100
ttgagtttat ttaatgtctg tttagggcagg aaaaatggg tattgtcttt catatttaaa 47160
atatcagcta cactctgggt ataataattaa tggttccat tttgaccagt tttgtttagt 47220
gaataaaaaat tatgtgatta ttgatctta aaaatgtaat atcaattaaa aggaaaggac 47280
agactcattt tcaccaaagt agcaagtatt tattaaatgt ccactttctt tttagcattg 47340
tgctagatac agtgcataat acaaaaagaa catggaccctc atctcgactc taatcaagt 47400
gaggagacaa gatgaacact gagaatacaa tagtgaggaa tactaacaaa tatatacaag 47460
gttaaaaagag tctaagtatg gtaggaatattt aggggaagaa agagctgaag tacttcagga 47520
agagtagaac atgaggctt atttaaaaga ttagcagaat ttaaggaaaa ggtgactttg 47580
ttgaagatta taatgtgaag acaaaggaaac gaggatgggataaaattttg tattcatgag 47640
gctttgaaga aattgactct agaggtata ttttgggtac ttttgggaaa tgaagttgg 47700
tttagtgagaa ggaacagattt atgaaaagac aagaaaacctg attaatgtca ggtatgat 47760
atatttgaag ttggtcagat ttatggcagt cctggcttt ccatttttag tttgtatgact 47820
ttgagaaagt tccttcttga agttttaaattt ttctgtatataaaaatgaaat aacacctgg 47880
gatctgctag gtttgggtttt aggattatataaataat gcatgcaaaa ctgttataat 47940
agtgcctggg aaaaataagt cctagttta aaaaacaagtc tttgtaaact gcttaggaca 48000
tgccctggat aggtaggtt gtaatacat agtaggtagg atctgtctcc ttgtat 48060
taggtaaaaaa aacaaaagga agagcttcag cttaaatacag tatgaactga cgagccctgg 48120
taggtttttt gacaaaagag caacacagta aaagtagtac ttagggaaa ttaacaagg 48180
aacatggcctt atacagtggg aatggggcctt ggagtcaagg aggtaaatgaaatgat 48240
ataattaagg aatagccagg cacgatggca catgcattgt atgcccagcta ctggagaggc 48300
tgaggtgggaa ggtatcatggg agtccaggag tttgagacca gcctgggcaa ctgagtgaga 48360
ccccaaatcc taaaaataac aaagttaaaaa agaataaaag tcatgaggc ttggactgga 48420
ttgataacag tgagaatacc gagaaggaa ccattaggcag tttgaaacgc gctcaactgca 48480
gcctcaaaacc ccagccaaa cgagccccc acctcagcc cccaaatgac tggaccacca 48540
gacatacacc accatgcattt actactttt ttagtttta cttttgttgc gacagggtct 48600
cactgtattt cccaggctgg tctcaaactc ctgtacttta gtgatctcc ttgtat 48660
tcccaagtg attacaggca tgagccacag tgccctggcc aaatagttt ctgtgatgt 48720
atattacttgc catcgtaat gtaatcaaa ggcattaaatg tattttactc tttttgaaaa 48780
aaatttagag gagaatattt ttatattaaat attctacca tattatgat ttaattgtaa 48840
attgttagcaa agcatgatgt gctttactaa attcctttt aatttagata agctttata 48900
agggtgaaat tatgtctttt ctacagcact aaacccaaaat ggcaaaatgg ttttagtccg 48960
taagctttgc tttttaaaaa tatgaaatataa acagggtttt aaaatgttat ttaatagtc 49020
ttctctgtta taaaacaaaga aaattgggtt tttcttagag cttttttttt gtagtgat 49080
ttgtccctaa agaggagtag cagtttttaga tgctaatgct tttccctgac tgtagttctat 49140
ttgcccattt gtttaactg cctagtgcaaa aattctaat aaaatgtat gatgaggatc 49200
ctgtccctcc tgaccaggatgg gttgtactt ttttcaggtt gttgtgacaag aatgactgtc 49260
tccctgggg ttattgtttt tgagcttact ggaggcttgg aatatattgt tccctttag 49320
gctgcagtca tgaccaggatgg gatgccttgc gcaaggaaagg cattttatgaa 49380

ttttgttattt cttgtatagg caaggtttg ccatgttgcc caggctggtt tcaagctcct 52860
 gggctaaac gatccacctg cctcagcctc ctgaagtgtc gggattacaa gtgtgagcca 52920
 ccacacctgg cgaaaagtgt tattttttt aatgacaat ttaagtcaaa gagattgaat 52980
 gttcacttct ggtactttgt atataagaga aacattccat taaataattt tttaaacatt 53040
 tctaaaattt catatttgt cattaaatgt ttaaacaatc agtataattt cattgataca 53100
 gtgtttgtta ttttgcgtt gtttaagatt gataattggg gttagtttta attcagaatg 53160
 ttattctatt taatgtcaca cttcatgtct ttttattttt tataatctatt aatgaattat 53220
 tttagctata gttattactg ttttagagat gaggcttct atgtgccc a gggtagactt 53280
 gaactcctgg gcttcagcaa tcccctcctc aacccggaa gcacatgaga ttagagacgt 53340
 gtgccactgt atctgcctg ctgtagttat ttttaattct tttgtcttc aactttata 53400
 ctagagttag aaatgattt caaaaccctat tgca gttttt gaggctttagt aatttgacta 53460
 tatatttctt ataacaactt aacttcagg t gtttacaaa actacagagt tttactcccc 53520
 cgtccacatt ttatactatt gatgtcacac tttacatctt tttatttgtt gaatccatta 53580
 atgatacttc tggtagttt tacactccac tattcagttg tcagacacca ttcagttgtt 53640
 agattgttat gagctaaaag caacttaatg ggtattttc aaaaatcatt tatgtcaatt 53700
 gcta atggac ttctttcta tgccatgatc atgctttttt tattttttagt acggagttc 53760
 actcttggtgc cctggctgg agtgcataatgg cgcggcctca gctca tgc acctccgcct 53820
 cctgggttca agcgattctc ctgcctcagc tggattaca ggcatgtgcc accgtgcggg 53880
 ctaattttgc attttagta gagacagggt ttcacatgt tggccaggct ggtctcgaac 53940
 tcctgacccctc agttgatctg cccaccttgg cctcccaag tgctggattt acagacgtga 54000
 gccactgcgc ctggcctgat catgctttt aagggtgtga gtaagtacta gttgctgggg 54060
 ctta tcttag tggccctcta ctcaatgtg tttagaacata gttttagaaagg ctgtagttt 54120
 caaaaaggagt aaaaagcagt gca gtttgc t gtttactc tgctctcaa tttaggactg 54180
 atgcttattt tggcttaat gttttttagt taaaattttt attcaaaaaaa tatatttttt 54240
 ttcttttttgc acacagagtc ttgctttgtc acccaggctg gagggtgtt gatgtatcat 54300
 ggctgactgc agccctgacc ttccgggctc aagtgtatctt tccacctcag cctcccaatt 54360
 acttgggacc accagcatgc ttggccgatt tttttttttt tttttttttt gtagaagcaa 54420
 gtttcccta tggccaaag gctggcttg aactttaggg ctcatgtat actcctgcct 54480
 cgcctccca aagtgttagg attacaagcc tgaccacca tggccggcca aatattttc 54540
 actataacaa atatcatatc tttatataact cagttttaat actaactcaa agtagaaaca 54600
 taaagctgaa tgacttattt atttttagat tctctccatt gagtttccctt ctccgtctt 54660
 tttgtatctt gaaacttttccat ccatcttgc cacttcttgc ttagcatttt ttttttatca 54720
 gca gtttcat tcagat tttttagttc tttcaacggt ggagggtttagg taggcagcag 54780
 gacagaagaa cttgaagcag agcacactgg agaggagaaa ttaaca aacgc ctttatgaat 54840
 aaaacaaccc cccaaatatca gtctgtgtc attatgacca taattgtact ttcatctcat 54900
 ctgtatgtt catgactttt ctagaaaattt atactttaac atgagaaaaag aaaaagaacc 54960
 agctaattca tagggatgga ggacacacca tagtcaaaagc aagaatgaaa ctctcttttag 55020
 tggccacccctc agtgcagaat aagtaacatt cagcagaggc aggtttcatt tgataatgaa 55080
 ttccctataat aaactgcgtt cagaatttttgc tttttttttaaaatccgtt ttccaaaccc 55140
 acttcccttag cccccaagttt agaaaacagc ttca gttttaaag aaaaattgtac gatgtatata 55200
 ctta tccatgaa aaataatttca ttccatgaa gatgatataat tattgttgc ttcttaattca 55260
 atcaaaatata aacaatttgc aaatggctt tcagttgact ctttcttgg ttaaggagaa 55320
 gataggaaaa aatgaaggaa tcagaagtc taggatacat taattttttt tatctctgaa 55380
 taaacagggtt gcctacttaa aaatctatca gttttttttt gttggctct tctctctt 55440
 ttccagaaaa ggcaggaaaa aacaagaagg tttttttttt tttttttttt tttttttttt 55500
 acagcacacc ccatcttccat cagcagaaaag tttttttttt tttttttttt tttttttttt 55560
 tgacatgagc ctttttacag tgacagacca cacccttgc tttttttttt tttttttttt 55620
 ccgaaagctg ggactgaggc agtgccttgc tttttttttt tttttttttt tttttttttt 55680
 gaatcgttc acttgc tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 55740
 ggagcatgtt agtca gtttgc tttttttttt tttttttttt tttttttttt tttttttttt 55800
 ggttca atcaaaatttca acat tttttttt tttttttttt tttttttttt tttttttttt 55860
 ttcccaaaac agtgcattt gtttgc tttttttttt tttttttttt tttttttttt tttttttttt 55920
 tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 55980
 aacccatgc tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 56040
 ataaatttctt agtacaataa taagtttctt gatattttgc tattttactctt ttcagccat 56100
 atttgcattt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 56160
 taaaatctt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 56220

tatataactg ctaaggacaa ataaatactc atgtatttaa aatgtataca 56280
ttgataattt attttccac ctttacaca tgaactgcca gtgttctcc attgacagga 56340
atataggaaa gaaacagatg tcacgggggt tggagacc ttaatgcaca gaattgatt 56400
agcaaataca ctacttcgtc accactgctc tctttcctg gacctggat ctgttctcc 56460
acacttctt ctttaggacc cttcatttcc actatataatt ctttcttgtaa gaacttaaga 56520
atgttggttt atccgaaggc aaataccaaa aaacagaggg tattcttgaa ttatgcataa 56580
actggatggc taatcctgaa cagcgtaaag ctggtgaaa ttctaaacag agaatcatag 56640
cagtttttg ttgtttttt ttttaacat gttgtagaaa acacattggt gacagaatac 56700
atgactcctg tccagagaaa ggagagaaaa agaacagaaa ggaaggaaat ttgttattt 56760
aacacctca tattttctca tttacttgc caggacctct gcaaagttagg tagttatata 56820
cctactttac agatgttagt attaaagctc aggaagctt aataattgc ccaaagtcat 56880
gtggtaaca agtcatggtt caaggaatca gactgtctt cctactttaa aaccgcct 56940
cttgctacta tttgcactg taagtactg atagaaatcc tctttctt tgatttctta 57000
aactactaaa acattttctt gccaatata ttagatttag ttaagaatag aaatatgaaa 57060
ctagagaatt agatctatgt tttagtgggg tcactgcgt aattaaaata actctttagg 57120
aatatgaagt aaatcattaa agagataaag cccttaaagg cagggagttt agaattatta 57180
aattctaata atttagatac tgattggaga agagatgtat tcataagtta ttattgttac 57240
tatttgcattt tttgttaat ttttgattt aatgtggca ccgacttcat taagttaaa 57300
aactcagtac tagttaaatg gggcaactt tcataaagct ttgcttagtcc ttgagccct 57360
ttatttgcattt aatggctcaa ctggacacca agctgagttt ttacaaacta ttatttgcattt 57420
caagttgtt tctgttctg gcatggctt ttctttgtg tactgacaaa tataatgtt 57480
attctgtga gttatgggtt actatgaaca cagaactgtt agggattaaat tttcatattt 57540
cagttgttg attaattccc aggtatttgg cagcatagat attagaaagg aaaatattta 57600
aaagaaaatgt taaaaataac gaagtgtata gagcgagggg tggatagcta attaaaattt 57660
tgtctggtcc tgcctgttca tatgaaaaaa ggggtggac tttcttctaa gggaatat 57720
taaatttgcattt tcatcatatt ttccttattt ctgtctgtca aggaaaataa attgatacat 57780
atatggggag aaaagagatc atttagggaa gtggctcatg ggacttttg ttttgcattt 57840
agtgtattag gaagtcgggt gtttttttc tcacttaat tatttaaaac ccagaaaaga 57900
aatgataatct tctggttttt aaaggagacc atgaagttt gcatacat cattgtatgt 57960
tagttcatac tgcatttttta gaagtggaaa atagtttattt ggaggaagat aacaaatctg 58020
gaacctttagg tgcaaggaga aaaagaatag atgaaaggaa aagatgttt taaattataa 58080
aaatttcaat tagctattgg tttctgcac ttatatttt aactgcagaa ttttcaaaa 58140
tcagttaaatc ttgggtggat tagcaggatg ttaataggag tgactcagaa aaaaacattt 58200
tgtgactgtc taagtttggaa aagtatttgg ttaaataccaa ttgaggtttc tttactatgg 58260
aactcctcag aacttataat atgttgcattt tctttgattt ccagatgagg ggtgggtaa 58320
taggatacat ggtttccag acttgcatttga aatgcact atttttgggt tgcaggaaag 58380
gatatagttag aactcatggg aactgggtt tcttggaa tgcattttggaa atgctgggtt 58440
atgccctgtt aactcttaca tcattttttt ttagccaaa agaaacagc aaataatgtt 58500
ttatatgagc cacatttgc gttgattttc cttccactct gtaaaattac taaagcagca 58560
ctctgacttt attatgctca aatcgcttctt ctccattaaat gtgttgcattt ccatctttt 58620
gggttttac ttatataata cagagattac tttgtttttt tcttaatttgcatttccactgggtc 58680
gttatacatt ttttttttttgcatttccactgggtt ttttttttttgcatttccactgggtc 58740
agatgatact aactgaaatt aatcattctg tataatttggaa tagaaaagca tgagtaagaa 58800
ttcaatttgcatttccactgggtt ttttttttttgcatttccactgggtc 58860
aaaatcaat gaattgtatgg cttaaaaaaa agaaatctca aatgttttagt caatgaagaa 58920
catctattga atgagtgaaat gttcattata tataatttggaa ttttttttttgcatttccactgggtc 58980
ggaaagggtgc tcccatgtcc tgagaacttt taaggatcga tacattttt ttaacataat 59040
aatgagaaaa catgagcaga gaaccattt ctgtcatttcc cattttctat cctcctgtcc 59100
ccccacccctcc cacccttccatcacttccactgggtt ttttttttttgcatttccactgggtc 59160
ggaaacaggct acttttttttgcatttccactgggtt ttttttttttgcatttccactgggtc 59220
tttaacaggg agtttgcatttccactgggtt ttttttttttgcatttccactgggtc 59280
attttgcatttccactgggtt ttttttttttgcatttccactgggtc 59340
ctgtttatatttgcatttccactgggtt ttttttttttgcatttccactgggtc 59400
tagcaatcttca attatatttgcatttccactgggtt ttttttttttgcatttccactgggtc 59460
gatgtgataa cagtgacatg cttaaatgaga aacaatttgcatttccactgggtt ttttttttttgcatttccactgggtc 59520
agtgaaagtc cttttatccactgggtt ttttttttttgcatttccactgggtc 59580
gcagtcacag cttctgttca ttttttttttgcatttccactgggtt ttttttttttgcatttccactgggtc 59640

ttgttaccat cactaaatgc ttggaacagt acacatgcac cacaacaaag gctcatcaaa 63120
 caggtaaagt ctcgaaggaa gcgagaacga aatctctat tgtgtgccgt gtggctcaaa 63180
 accgaaaaca atgaagctt gttttaaagg ataaagttt ctttttgc ttcctctcg 63240
 actttatgga taatgtgacc gggctttatg caaattttctt atttctaaaaa ctactactat 63300
 gatataacaag tgctgttag cataattaaa taaaatgtg ctgcttgac agtaaagaga 63360
 aggaagtatt ctgattagct gtatctggta ttaattgtat gttaaaacac tggaaatttt 63420
 aaaattgaaa ttagatcagt cattctttc ttttctcaag atatctcatg gctgacactg 63480
 aagaagaaat gtaattcata acttgcacta aatgtatatt tttttctta aaaatttacc 63540
 attcttattt atattttat gattaaaat ttataaaaata cagatcagt aatattgcac 63600
 ttaagtaatt ttacctttt aatgtgatt ttatagaata attcagactt acaaatacag 63660
 agatatgaac aaagttaca gtggaaacaa aggttaaaaa aaagggttg gttctctc 63720
 tgtgatccag tgtgcacata aacccttctc tgatcttca ctgcccattctt ctggattatg 63780
 tcttctgacc tgtccatttt gaccattaa ctggaaagtt gaaaaactac attaactgga 63840
 aagttgaaaaa actacattac ttggagaat aaaaccgaaa gttcgtgtat accttcttaa 63900
 aaaaaaaaaatc aaacccaaaaa tgtgaaaaca atagaattgc aaagatagca gttaaaattt 63960
 taatctgaaa ataaccctt aatctcggc tagttatgt ccataatttga agtggtcagt 64020
 gatggtttga acatttttgc caggatgat taaaatgcac tggattat tttggatttt 64080
 ttttttggta attgtctgtt ttaatcacaag ccttaattca caattggca aggagttta 64140
 ctcaaaggac tgggctaaat attctgtat tatgcatttt tgataggaaa atggaaattt 64200
 tgcaaacaga cattttctt tttttggct ggagtgcagt ggggcattgtt cttggctcac 64260
 tgcagcgttg accacctggg ctcaagtgtt actccgcctt cagccaccca agtagctggc 64320
 actacgggcacac caccgcacca tgcccagcta attttttgtt atttttagta gagatggggt 64380
 tttgccatgc tgcccaggct ggtctcaact cctcagctca agcaatctgc ctgcgtgagc 64440
 cttccaaatggtggattt caggcgtggg ccactgcgc tggcccagac agacattttc 64500
 tggacacaca ctggcaatga gctgttttta cattttgaaa gtgattctt acttcctagt 64560
 tcttaatttattt agtataccta ttaagatctg taagatcctg aagacataag atcatgaagc 64620
 catataagaa tgaggattga aagttgagca aaattttcg gattttggaa aacattctta 64680
 gctgtgctat ctgcctaaaa ttattcctta ttacttctt ccttgcacag acttcaagtt 64740
 ttcttcatacg cccttcaaa gttttttagt ccattccagag taaaatcatt tctaaatgat 64800
 agttctgtat atctccaact cgtcttaagt gtatttgcctt gtgtcaacg tattgctaga 64860
 ctatgaactc ctcagcatgg ctgctggata acttaattgtt cctgagttaa tagccttcaa 64920
 aggacaaatc ggttttttgc cagatagctt cgtaaaactt cacatggagt ttattttatc 64980
 atatttccctt ttttatttc tgctcctcctt ttaattggcc atcttgcctt agagactgac 65040
 atttcagggtt ggatattaaat taaagcatttta attttgtttt ttggtatatt tctatcccta 65100
 gtatttctat cttactgcta aaatacagga aaagtgccgtt atttttaatg catttagtgg 65160
 ttttctttgg ttttatctgtt tccattttc tttttcatac attgaagttt gtctcctttt 65220
 caaccaaaat aatgaaatag tggagaccat gaaattgtt tgcctggctt attggcaaat 65280
 taatttacca atataataag ttagcgcctt tgtttgaata cccttttga gaaggtatga 65340
 tgagaatggg caagggtgtt 65359

<210> 4
 <211> 765
 <212> PRT
 <213> Human

<400> 4
 Gly Thr His Tyr Thr Met Thr Asn Gly Gly Ser Ile Asn Ser Ser Thr
 1 5 10 15
 His Leu Leu Asp Leu Leu Asp Glu Pro Ile Pro Gly Val Gly Thr Tyr
 20 25 30
 Asp Asp Phe His Thr Ile Asp Trp Val Arg Glu Lys Cys Lys Asp Arg
 35 40 45
 Glu Arg His Arg Arg Ile Asn Ser Lys Lys Lys Glu Ser Ala Trp Glu
 50 55 60
 Met Thr Lys Ser Leu Tyr Asp Ala Trp Ser Gly Trp Leu Val Val Thr
 65 70 75 80
 Leu Thr Gly Leu Ala Ser Gly Ala Leu Ala Gly Leu Ile Asp Ile Ala

	85	90	95
Ala Asp Trp Met Thr Asp Leu Lys Glu Gly Ile Cys Leu Ser Ala Leu			
100	105	110	
Trp Tyr Asn His Glu Gln Cys Cys Trp Gly Ser Asn Glu Thr Thr Phe			
115	120	125	
Glu Glu Arg Asp Lys Cys Pro Gln Trp Lys Thr Trp Ala Glu Leu Ile			
130	135	140	
Ile Gly Gln Ala Glu Gly Pro Gly Ser Tyr Ile Met Asn Tyr Ile Met			
145	150	155	160
Tyr Ile Phe Trp Ala Leu Ser Phe Ala Phe Leu Ala Val Ser Leu Val			
165	170	175	
Lys Val Phe Ala Pro Tyr Ala Cys Gly Ser Gly Ile Pro Glu Ile Lys			
180	185	190	
Thr Ile Leu Ser Gly Phe Ile Arg Gly Tyr Leu Gly Lys Trp Thr			
195	200	205	
Leu Met Ile Lys Thr Ile Thr Leu Val Leu Ala Val Ala Ser Gly Leu			
210	215	220	
Ser Leu Gly Lys Glu Gly Pro Leu Val His Val Ala Cys Cys Cys Gly			
225	230	235	240
Asn Ile Phe Ser Tyr Leu Phe Pro Lys Tyr Ser Thr Asn Glu Ala Lys			
245	250	255	
Lys Arg Glu Val Leu Ser Ala Ala Ser Ala Ala Gly Val Ser Val Ala			
260	265	270	
Phe Gly Ala Pro Ile Gly Gly Val Leu Phe Ser Leu Glu Glu Val Ser			
275	280	285	
Tyr Tyr Phe Pro Leu Lys Thr Leu Trp Arg Ser Phe Phe Ala Ala Leu			
290	295	300	
Val Ala Ala Phe Val Leu Arg Ser Ile Asn Pro Phe Gly Asn Ser Arg			
305	310	315	320
Leu Val Leu Phe Tyr Val Glu Tyr His Thr Pro Trp Tyr Leu Phe Glu			
325	330	335	
Leu Phe Pro Phe Ile Leu Leu Gly Val Phe Gly Gly Leu Trp Gly Ala			
340	345	350	
Phe Phe Ile Arg Ala Asn Ile Ala Trp Cys Arg Arg Arg Lys Ser Thr			
355	360	365	
Lys Phe Gly Lys Tyr Pro Val Leu Glu Val Ile Ile Val Ala Ala Ile			
370	375	380	
Thr Ala Val Ile Ala Phe Pro Asn Pro Tyr Thr Arg Leu Asn Thr Ser			
385	390	395	400
Glu Leu Ile Lys Glu Leu Phe Thr Asp Cys Gly Pro Leu Glu Ser Ser			
405	410	415	
Ser Leu Cys Asp Tyr Arg Asn Asp Met Asn Ala Ser Lys Ile Val Asp			
420	425	430	
Asp Ile Pro Asp Arg Pro Ala Gly Ile Gly Val Tyr Ser Ala Ile Trp			
435	440	445	
Gln Leu Cys Leu Ala Leu Ile Phe Lys Ile Ile Met Thr Val Phe Thr			
450	455	460	
Phe Gly Ile Lys Val Pro Ser Gly Leu Phe Ile Pro Ser Met Ala Ile			
465	470	475	480
Gly Ala Ile Ala Gly Arg Ile Val Gly Ile Ala Val Glu Gln Leu Ala			
485	490	495	
Tyr Tyr His His Asp Trp Phe Ile Phe Lys Glu Trp Cys Glu Val Gly			
500	505	510	
Ala Asp Cys Ile Thr Pro Gly Leu Tyr Ala Met Val Gly Ala Ala Ala			
515	520	525	
Cys Leu Gly Gly Val Thr Arg Met Thr Val Ser Leu Val Val Ile Val			
530	535	540	

Phe Glu Leu Thr Gly Gly Leu Glu Tyr Ile Val Pro Leu Met Ala Ala
 545 550 555 560
 Val Met Thr Ser Lys Trp Val Gly Asp Ala Phe Gly Arg Glu Gly Ile
 565 570 575
 Tyr Glu Ala His Ile Arg Leu Asn Gly Tyr Pro Phe Leu Asp Ala Lys
 580 585 590
 Glu Glu Phe Thr His Thr Thr Leu Ala Ala Asp Val Met Arg Pro Arg
 595 600 605
 Arg Asn Asp Pro Pro Leu Ala Val Leu Thr Gln Asp Asn Met Thr Val
 610 615 620
 Asp Asp Ile Glu Asn Met Ile Asn Glu Thr Ser Tyr Asn Gly Phe Pro
 625 630 635 640
 Val Ile Met Ser Lys Glu Ser Gln Arg Leu Val Gly Phe Ala Leu Arg
 645 650 655
 Arg Asp Leu Thr Ile Ala Ile Glu Ser Ala Arg Lys Lys Gln Glu Gly
 660 665 670
 Ile Val Gly Ser Ser Arg Val Cys Phe Ala Gln His Thr Pro Ser Leu
 675 680 685
 Pro Ala Glu Ser Pro Arg Pro Leu Lys Leu Arg Ser Ile Leu Asp Met
 690 695 700
 Ser Pro Phe Thr Val Thr Asp His Thr Pro Met Glu Ile Val Val Asp
 705 710 715 720
 Ile Phe Arg Lys Leu Gly Leu Arg Gln Cys Leu Val Thr His Asn Gly
 725 730 735
 Arg Leu Leu Gly Ile Ile Thr Lys Lys Asp Ile Leu Arg His Met Ala
 740 745 750
 Gln Thr Ala Asn Gln Asp Pro Ala Ser Ile Met Phe Asn
 755 760 765

<210> 5
 <211> 767
 <212> PRT
 <213> Human

<400> 5
 Gly Thr His Tyr Thr Met Thr Asn Gly Gly Ser Ile Asn Ser Ser Thr
 1 5 10 15
 His Leu Leu Asp Leu Leu Asp Glu Pro Ile Pro Gly Val Gly Thr Tyr
 20 25 30
 Asp Asp Phe His Thr Ile Asp Trp Val Arg Glu Lys Cys Lys Asp Arg
 35 40 45
 Glu Arg His Arg Arg Ile Asn Ser Lys Lys Lys Glu Ser Ala Trp Glu
 50 55 60
 Met Thr Lys Ser Leu Tyr Asp Ala Trp Ser Gly Trp Leu Val Val Thr
 65 70 75 80
 Leu Thr Gly Leu Ala Ser Gly Ala Leu Ala Gly Leu Ile Asp Ile Ala
 85 90 95
 Ala Asp Trp Met Thr Asp Leu Lys Glu Gly Ile Cys Leu Ser Ala Leu
 100 105 110
 Trp Tyr Asn His Glu Gln Cys Cys Trp Gly Ser Asn Glu Thr Thr Phe
 115 120 125
 Glu Glu Arg Asp Lys Cys Pro Gln Trp Lys Thr Trp Ala Glu Leu Ile
 130 135 140
 Ile Gly Gln Ala Glu Gly Pro Gly Ser Tyr Ile Met Asn Tyr Ile Met
 145 150 155 160
 Tyr Ile Phe Trp Ala Leu Ser Phe Ala Phe Leu Ala Val Ser Leu Val

	165	170	175												
Lys	Val	Phe	Ala	Pro	Tyr	Ala	Cys	Gly	Ser	Gly	Ile	Pro	Glu	Ile	Lys
	180						185								190
Thr	Ile	Leu	Ser	Gly	Phe	Ile	Ile	Arg	Gly	Tyr	Leu	Gly	Lys	Trp	Thr
	195						200								205
Leu	Met	Ile	Lys	Thr	Ile	Thr	Leu	Val	Leu	Ala	Val	Ala	Ser	Gly	Leu
	210						215								220
Ser	Leu	Gly	Lys	Glu	Gly	Pro	Leu	Val	His	Val	Ala	Cys	Cys	Cys	Gly
	225			230				235							240
Asn	Ile	Phe	Ser	Tyr	Leu	Phe	Pro	Lys	Tyr	Ser	Thr	Asn	Glu	Ala	Lys
	245						250								255
Lys	Arg	Glu	Val	Leu	Ser	Ala	Ala	Ser	Ala	Ala	Gly	Val	Ser	Val	Ala
	260						265								270
Phe	Gly	Ala	Pro	Ile	Gly	Gly	Val	Leu	Phe	Ser	Leu	Glu	Glu	Val	Ser
	275						280								285
Tyr	Tyr	Phe	Pro	Leu	Lys	Thr	Leu	Trp	Arg	Ser	Phe	Phe	Ala	Ala	Leu
	290						295								300
Val	Ala	Ala	Phe	Val	Leu	Arg	Ser	Ile	Asn	Pro	Phe	Gly	Asn	Ser	Arg
	305					310				315					320
Leu	Val	Leu	Phe	Tyr	Val	Glu	Tyr	His	Thr	Pro	Trp	Tyr	Leu	Phe	Glu
	325					330									335
Leu	Phe	Pro	Phe	Ile	Leu	Leu	Gly	Val	Phe	Gly	Gly	Leu	Trp	Gly	Ala
	340					345									350
Phe	Phe	Ile	Arg	Ala	Asn	Ile	Ala	Trp	Cys	Arg	Arg	Arg	Lys	Ser	Thr
	355					360									365
Lys	Phe	Gly	Lys	Tyr	Pro	Val	Leu	Glu	Val	Ile	Ile	Val	Ala	Ala	Ile
	370					375									380
Thr	Ala	Val	Ile	Ala	Phe	Pro	Asn	Pro	Tyr	Thr	Arg	Leu	Asn	Thr	Ser
	385					390				395					400
Glu	Leu	Ile	Lys	Glu	Leu	Phe	Thr	Asp	Cys	Gly	Pro	Leu	Glu	Ser	Ser
	405					410									415
Ser	Leu	Cys	Asp	Tyr	Arg	Asn	Asp	Met	Asn	Ala	Ser	Lys	Ile	Val	Asp
	420					425									430
Asp	Ile	Pro	Asp	Arg	Pro	Ala	Gly	Ile	Gly	Val	Tyr	Ser	Ala	Ile	Trp
	435					440									445
Gln	Leu	Cys	Leu	Ala	Leu	Ile	Phe	Lys	Ile	Ile	Met	Thr	Val	Phe	Thr
	450					455									460
Phe	Gly	Ile	Lys	Val	Pro	Ser	Gly	Leu	Phe	Ile	Pro	Ser	Met	Ala	Ile
	465					470				475					480
Gly	Ala	Ile	Ala	Gly	Arg	Ile	Val	Gly	Ile	Ala	Val	Glu	Gln	Leu	Ala
	485					490									495
Tyr	Tyr	His	His	Asp	Trp	Phe	Ile	Phe	Lys	Glu	Trp	Cys	Glu	Val	Gly
	500					505									510
Ala	Asp	Cys	Ile	Thr	Pro	Gly	Leu	Tyr	Ala	Met	Val	Gly	Ala	Ala	Ala
	515					520									525
Cys	Leu	Gly	Gly	Val	Thr	Arg	Met	Thr	Val	Ser	Leu	Val	Val	Ile	Val
	530					535									540
Phe	Glu	Leu	Thr	Gly	Gly	Leu	Glu	Tyr	Ile	Val	Pro	Leu	Met	Ala	Ala
	545					550				555					560
Val	Met	Thr	Ser	Lys	Trp	Val	Gly	Asp	Ala	Phe	Gly	Arg	Glu	Gly	Ile
	565					570									575
Tyr	Glu	Ala	His	Ile	Arg	Leu	Asn	Gly	Tyr	Pro	Phe	Leu	Asp	Ala	Lys
	580					585									590
Glu	Glu	Phe	Glu	Phe	Thr	His	Thr	Thr	Leu	Ala	Ala	Asp	Val	Met	Arg
	595					600									605
Pro	Arg	Arg	Asn	Asp	Pro	Pro	Leu	Ala	Val	Leu	Thr	Gln	Asp	Asn	Met
	610					615									620

Thr Val Asp Asp Ile Glu Asn Met Ile Asn Glu Thr Ser Tyr Asn Gly
 625 630 635 640
 Phe Pro Val Ile Met Ser Lys Glu Ser Gln Arg Leu Val Gly Phe Ala
 645 650 655
 Leu Arg Arg Asp Leu Thr Ile Ala Ile Glu Ser Ala Arg Lys Lys Gln
 660 665 670
 Glu Gly Ile Val Gly Ser Ser Arg Val Cys Phe Ala Gln His Thr Pro
 675 680 685
 Ser Leu Pro Ala Glu Ser Pro Arg Pro Leu Lys Leu Arg Ser Ile Leu
 690 695 700
 Asp Met Ser Pro Phe Thr Val Thr Asp His Thr Pro Met Glu Ile Val
 705 710 715 720
 Val Asp Ile Phe Arg Lys Leu Gly Leu Arg Gln Cys Leu Val Thr His
 725 730 735
 Asn Gly Arg Leu Leu Gly Ile Ile Thr Lys Lys Asp Ile Leu Arg His
 740 745 750
 Met Ala Gln Thr Ala Asn Gln Asp Pro Ala Ser Ile Met Phe Asn
 755 760 765

<210> 6
 <211> 60
 <212> PRT
 <213> Xenopus laevis

<400> 6
 Met Asp Ile Ser Ser Asp Pro Tyr Leu Pro Tyr Asp Gly Gly Asp
 1 5 10 15
 Asn Ile Pro Leu Arg Asp Leu His Lys Arg Gly Thr His Tyr Thr Val
 20 25 30
 Thr Asn Gly Gly Ala Ile Asn Ser Thr Thr His Leu Leu Asp Leu Leu
 35 40 45
 Asp Glu Pro Ile Pro Gly Val Gly Thr Tyr Asp Asp
 50 55 60